

VLASENKO, G.A.

Village or city? Zhil.-kom. khoz. 11 no.12:4-5 D '61.

(MIRA 16:11)

1. Predsedatel' Strashenskogo rayonnogo ispolnitel'nogo komiteta
Moldavskoy SSh.

BEGAGOVEN, I.A.; VLASENKO, G.A.; KHODAKOVSKIY, N.A.

Organization and methodology of conducting industrial tests of
parts of drills for wear. Sbor. nauch. trud. KGRI no.19:15-20 '62.
(MIRA 16:5)

(Boring machinery--Testing)

(Mechanical wear)

VLASENKO, G.S.

DECEASED

c1957

1968/4

SEE ILC

ZOOLOGY

SKRYABINSKIY, V.S., inzh.; VLASENKO, G.V., inzh.

D542 wattmeter. Vest. elektroprom. 31 no.12:69-70 D '60.

(Wattmeter)

(MIRA 14:2)

VLASENKO, G. (Yan.)

USSR/Physics Aerosols Dispersions

Nov 48

"A Continuous Method for Ultramicroscopic Measurements of the Particle Concentrations in Aerosols and Other Dispersed Systems," B. Deryagin, Corr Mem, Acad Sci USSR, G. Vlasenko, Lab of Surface Forces, Inst of Phys Chem, Acad Sci USSR, 3 3/4 pp

"Dok Ak Nauk SSSR" Vol LXIII, No 2

Among many advantages adduced for this method are: less time is spent in measuring small particle concentrations; aerosol volumes are more quickly and correctly measured by the counter system employed; and it makes future introduction of automatic calculation for aerosol particles possible. It should be applicable to many scientific problems. Submitted 10 Jul 48.

PA 55/49T81

Translation - 2524467, 30 Apr 54

VLASENKO, G. Ya.

USSR/Chemistry - Aerosols Jul/Aug 51

"Flow Ultramicrophotometric Method of Dispersion Analysis," B. V. Deryagin, G. Ya. Vlasenko, Inst of Phys Chem, Acad Sci USSR, Lab of Surface Forces

"Kolloid Zhur" Vol XIII, No 4, pp 249-250

Describes method for dispersion analysis of aerosols and other colloidal dispersion systems in state of flow by method of ultramicroscopic count of particles. Equipment specially devised and used: flow ultramicrophotometers for dispersion analysis of aerosols using photometric wedge for gradually reducing illumination of zone in which

188T3

USSR/Chemistry - Aerosols(Contd) Jul/Aug 51

flashes are detd. Measuring aerosol systems (including water mist) shows comparative ease with which the fractional composition is broken down [Observed]. Developed graduating method permitting transition from the "optical" to the "geometric radius" and carried out measurements on oil aerosols.

188T3

VERVAGEN, B. V., VLASENKO, G. YA.

Colloids

Flow method and apparatus for measuring partial concentrations of aerosols and other colloid-disperse systems. Trudy Inst. fiz. khimii AN SSR No. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1953² Unclassified.

VLASENKO, O.Ya.

DERYAGIN, B.V., chlen-korrespondent; VLASENKO, O.Ya.

Continuous ultramicroscope. Priroda 42 no.11:29-35 N '53. (MIRA 6:11)

1. Akademiya nauk SSSR (for Deryagin). (Microscope and microscopy)

DERYAGIN, B.V.; VLASENKO, G.Ya., kandidat khimicheskikh nauk

Determining the degree of dust pollution of air by continuous
microscopy. Bor'ba s sil. 2:223-229 '55. (MLRA 9:5)

1. Chlen-korrespondent Akademii nauk SSSR (for Deryagin) 2.
Institut fizicheskoy khimii Akademii nauk SSSR (for Vlasenko)
(DUST)

VLASENKO, G.Ya., kandidat khimicheskikh nauk.

Results of mass ultramicroscopy used in determining the degree of
ust pollution in coal mines of the Donets Basin. Bor'ba s sil.
2:230-234 '55. (MLBA 9:5)

1. Insitut fizicheskikh nauk Akademii nauk SSSR.
(DONETS BASIN--MINE DUST)

80803

SOV/124-59-9-10352

3.5000

Translation from: Referativnyy zhurnal, Mekhanika, 1959, Nr 9, p 113 (USSR)

AUTHORS: Vlasenko, G.Ya., Deryagin, B.V., Kudravytseva, N.M., Prokhorov,
P.S., Storozhilova, A.I., Churakov, V.V.

TITLE: Flow Methods for Investigating Atmospheric Aerosols ¹⁷

PERIODICAL: V sb.: Issled. oblakov, osadkov i grozovogo elektrichestva.
Leningrad, Gidrometeoizdat, 1957, pp 185 - 188

ABSTRACT: Not only the number of particles within the volume unit, but also their dimension distribution can be determined by the ultramicroscopic flow investigation method. For this purpose, an optical discriminator (photometric wedge), making it possible to obtain the particle-brightness distribution, was mounted into the target illuminating device of an ultramicroscope. A new wedge-graduation method is described; the graduation curves of the dependence of particle dimensions on the wedge position can be obtained quickly, when applying the method mentioned. The authors report on the flow method applied to the study of the atmospheric condensation nuclei. For this purpose, a simple

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Flow Methods for Investigating Atmospheric Aerosols

accessory device is developed for "revealing" the condensation nuclei containing in the atmosphere. This accessory device consists of an air-moistening chamber and a cooling channel, in which vapor condensation on the condensation nuclei proceeds. The condensation nuclei, enlarged in this way, are carried away by the air current, arrive at the cell of the ultramicroscope, and can be recorded by the observer. The optimum operation conditions of the device were determined experimentally. By the ultramicroscopic flow method, the automation of registering aerosol particles or "revealed" condensation nuclei can be brought about. The design of an automatic counter developed for this purpose is presented. This counter carries out the registration of aerosol particles of high numerical concentrations without failing.

S.V. Severin

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X

S/069/61/023/002/007/008
B101/B208

AUTHORS: Deryagin, B. V., Churakov, V. V., and Vlasenko, G. Ya.

TITLE: Flow ultramicroscope with automatic count of aerosol particles'

PERIODICAL: Kolloidnyy zhurnal, v. 23, no. 2, 1961, 234-237

TEXT: The dust content of air is measured with a flow microscope by visual observation of the dust particles flashing up in the light. The visual observation is, however, tiresome. The present paper therefore describes an automatic counting device. Fig. 2 presents the scheme of this apparatus which uses a БАК (VDK) ultramicroscope. The aerosol is sucked into cuvette (1), and passes through the illuminated zone (2). The light scattered by the aerosol particles is focused by objective (3) to the cathode (4) of an ФЭУ-19 (FEU-19) photomultiplier which is at a distance of 500 mm. In front of the photomultiplier there is a rotary diaphragm (5) with apertures of 0.5, 1.5, 7.5, and 30 mm diameter for adapting the light intensity to the aerosol concentration. If the apparatus is remote-controlled, (5) may be mounted on a БА-404А (BD-404A) selsyn motor (6) which is

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Flow ultramicroscope ...

driven by selsyn motor (7). A 75-w and 10-v lamp of the type K-21 (Π_1 in Fig. 2) was used as light source. The optical discriminator (8) with 5 apertures containing neutral gray glass filters of different densitation was used for subdivision of the particle size. (8) is fastened on the axis of a C43 (SchZ) telephone relay (9). The latter operates when the contact is closed on disk (10). Simultaneously, the two-way cock (11) on the axis of (10) is opened or closed. (10) and (11) are driven by electric motor (14) (15-20 w). The other end of the motor shaft drives air pump (15) which produces a partial vacuum of 20-30 mm Hg. When (11) is open, the aerosol is sucked in. When (11) is closed, (15) is connected with (1) via capillary (12) and U tube (13), the change of the liquid level in (13) being equal to the aerosol volume sucked through (1). The voltage of the photomultiplier is increased by pulse amplifier (16) and conveyed to mechanical counter (17). In order to be independent of voltage fluctuations in power supply, the photomultiplier is fed by ГБ-300 (GB-300) batteries. The aerosol concentration is calculated from the following equation: $N = na/V$ (N = number of particles in 1 cm^3 , n = number of particles obtained by the counter, V = volume (cm^3) of aerosol sucked through the cuvette, a = constant for the corresponding aperture of the rotary diaphragm). This device allows to

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Flow ultramicroscope ...

measure aerosol concentrations between $10 \cdot 10^7$ particles per cm^3 without dilution. It records particles of a diameter from 10^{-5} to $20 \cdot 10^{-4}$ cm approximately. Determination of aerosol concentration and division into five fractions according to particle size takes 7-12 min. A. Ye. Mikirov and A. G. Laktionov are mentioned. There are 3 figures, 1 table, and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc. The reference to English-language publication reads as follows: F. T. Gucker, C. T. O'Konski, J. Amer. Chem. Soc., 69, 2422, 1947.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR, Laboratoriya poverkhnostnykh yavleniy (Institute of Physical Chemistry of the AS USSR, Laboratory of Surface Phenomena)

SUBMITTED: April 28, 1960

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Flow ultramicroscope ...

S/069/61/023/002/007/008
B101/B208

Legend to Fig. 2: a) reductor; b) the
relay of the optical discriminator;
c) remote-control unit

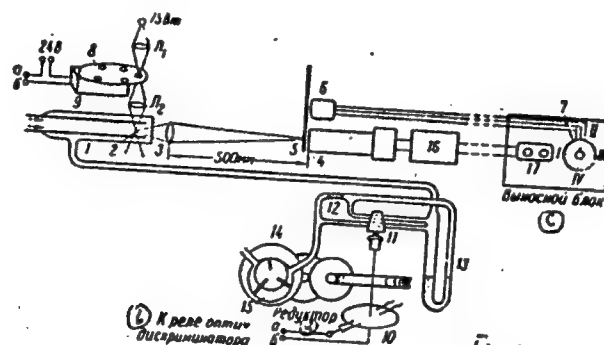


Fig. 2

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L 06543-67 EWT(1) JK

ACC NR: AP6020683

SOURCE CODE: UR/0016/66/000/006/0083/0088

AUTHOR: Gromyko, A. I.; Vlasenko, G. Ya.; Terskikh, I. I.

35
B

ORG: Virology Institute, Academy of Medical Sciences, SSSR; (Institut virusologii im. Ivanovskogo AMN SSSR); Institute of Physical Chemistry, Academy of Sciences, SSSR (Institut fizicheskoy khimii AN SSSR, Moscow)

TITLE: Determining the physical parameters of viral aerosols. ¹⁰Report 1: Using continuous ultramicroscopy to design working conditions for an aerosol chamber

SOURCE: Zh mikrobiol, epidemiol i immunobiol, no. 6, 1966, 83-88

TOPIC TAGS: VIROLOGY, BIOMEDICAL CHAMBER, aerosol, biologic aerosol, viral aerosol, ultramicroscope, aerosol chamber, visual control, dosimetry, medical experiment/IVK-2 BIOMEDICAL chamber, VDK ultramicroscope

ABSTRACT: Continuous ultramicroscopy was used to determine concentration and dosimetry of viral aerosols and the results obtained by this visual method were compared with previous theoretical calculations. Continuous ultramicroscopy had been found to be the best empirical method for obtaining data on the time required for the attainment of a maximal equilibrium concentration in an aerosol chamber, and for the evacuation of aerosol from the chamber. An aerosol composed of a suspension of mouse lung tissue containing either influenza virus (strain Pr-8, type A) or ornithosis virus (strain psittacosis Lor.) was used. The aerosol was produced in an IVK-2

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UDC: 616-022.1: [576.858:615.417.9-011-076.4

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ACC NR: AP6020683

aerosol chamber by an atomizer consisting of a metal sprayer mounted in a glass globe; the size of particles leaving the atomizer was measured microphotometrically. Using a type VDK continuous ultramicroscope, "flashes" produced by particles crossing the illuminated zone in a given time were counted. The rate of flow was regulated to produce not more than 50—100 flashes per minute. When the given number of particles had been registered, counting ceased and the volume of air which had entered was measured. The conimetric concentration of the substance (n) was calculated by the formula

$$n = \frac{a \cdot N}{w}$$

where N is the number of "flashes" counted, w is the volume of air, and a is a constant of the device for a given opening of the atomizer diaphragm. The particle-size composition of the aerosol was determined by the sedimentation method, using a modification of the Stokes-Cunningham formula for the radius of the particles. In the simplest form, this formula was:

$$r = 3,34 \cdot 10^{-4} \text{ cm} \sqrt{\frac{1}{t}}$$

where t is the time in seconds of particle settling. Table 1 shows the rate of settling in relation to particle radius

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Table 1. Relation of rate of settling to radius of aerosol particles.

Time of settling (in sec)	Particle radius (in μ)	Time of settling (in sec)	Particle radius (in μ)
1	3.31	25	0.67
5	1.49	30	0.61
8	1.19	35	0.57
10	1.06	40	0.53
12	0.96	45	0.49
15	0.86	50	0.47
17	0.81	55	0.46
20	0.75	60	0.43
22	0.71		

Table 2 shows data obtained using continuous microscopy on the time required to produce a maximum equilibrium concentration of aerosol in the chamber.

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Table 2. Relation of degree of chamber saturation with aerosol particles to dispersion time.

Dispersion time (min)	Number of aerosol particles (in $1 \times 10^5 \text{ cm}^3$)				
	n_1	n_2	n_3	n_4	av
5	1.6	1.3	1.3	—	1.4
8	3.8	2.8	3.8	4.1	3.6
10	7.7	8.2	7.2	—	7.7
15	6.7	6.2	6.5	7.8	6.7
20	6.9	6.2	6.5	7	6.6
25	8.2	7.2	8.2	6.2	7.4

These results were compared with theoretical determinations using the formula $t = 2.3 \cdot v/L$ (v = chamber volume = 220 l; L = input rate of atomized aerosol = 38 l/min), which showed the time required to obtain an equilibrium concentration to be 13.3 min; the result using continuous ultramicroscopy was 10 min. Atomizing the ornithosis suspension for the period of time needed to create a maximal equilibrium concentration produced an aerosol which would kill 7—8 g mice exposed to it for 1 hr in 5—6 days. Using continuous ultramicroscopy, the time needed to evacuate the viral aerosol from the chamber was determined visually.

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ACC NR: AP6020683

Table 3. Degree of evacuation of aerosol from chamber in relation to number of air changes

Number of changes	Concentration of particles (in $1 \times 10^3 \text{ cm}^3$)
Background	0.03
Before removal	7.75
First air change	0.30
Third air change	0.15
Fifth air change	0.03
Tenth air change	0.03

Previous studies had shown that the chamber would be sufficiently disinfected after three air changes; however, continuous ultramicroscopy revealed that only after five changes does the count return to normal levels. These data demonstrated the expediency of using continuous ultramicroscopy, based on the principle of counting aerosol particles in a continuous air flow, to study the physical properties of biological aerosols, and to determine their concentrations and particle sizes. Also, it was established that this method will determine the time necessary for maximal saturation of a chamber with an aerosol with sufficient accuracy. Orig. art. has: 2 figures, 3 tables and 5 formulas. [EL]

SUB CODE: 06/ SUBM DATE: 21May65/ ORIG REF: 022/ OTH REF: 002/
Card 5/5 m.e.

L 05866-67 EWT(1)/T JK
ACC NR: AP6024444 SOURCE CODE: UR/0016/66/000/007/0094/0097

AUTHOR: Gromyko, A. I.; Danilov, A. I.; Vlasenko, G. Ya.

ORG: Virology Institute im. Ivanovskiy, AMN SSSR (Institut virusologii)

TITLE: Determining the physical parameters of viral aerosols. Report II. Studying the condition of an aerosol cloud in the IVK-2 chamber and the significance of observed shifts for dosimetry of an infective agent by aerosol.

SOURCE: Zhurnal mikrobiologii, epidemiologii, i immunobiologii, no. 7, 1966, 94-97

TOPIC TAGS: aerosol^{chemistry}, aerosol chamber^{bacterial aerosol, virology}, dosimetry, virus disease, aerosol infection/
IVK-2 chamber
aerosol

ABSTRACT: The objectives of this study were: to determine the concentration of substances dispersed in aerosols; to establish the dependence of concentration on time; to clarify the fractional composition of aerosols; to calculate their gravimetric (weight) concentration; and to determine the quantity of aerosol entering the respiratory system of an animal during exposure. The greatest reduction in particle concentration in an aerosol occurs in approximately the first thirty minutes; however, between 30 min and 2 hr the concentration does not change significantly. Knowledge of the quantity of particles and their concentration by weight is necessary in determining the quantity of aerosol substance aspirated by an animal; it was previously established that an hour's exposure to aerosol was sufficient to produce infection,

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UDC: 616-022.1:/576.858:615.417.9-011

L 05866-57

ACC NR: AP6024444

but the shifts in aerosol concentration occurring during a given period were not considered. Weight concentration was determined by taking particle weight as equal to volume and using standard computational methods. Thus, knowing the weight concentra-

Table 1. Change in aerosol concentration after cessation of spraying

Time interval (min)	Number of aerosol particles (x10 ⁵) in 1 cm ³				
	s	s	s	s	s
Background	0.01	0.07	—	—	0.04
1	7.75	8.22	7.2	—	7.7
5	7	6.2	8.8	—	7.3
10	6.8	7	5.6	6.2	6.4
15	5.2	5.2	5.6	5.2	5.3
20	6.2	5.6	6.9	5.2	6.1
25	4.4	5.2	3.4	3.8	4.2
30	5.2	4.8	5.2	5.2	5.1
35	3.6	3.8	3.8	4.1	3.8
40	3.8	4.1	4.1	4.4	4.1
45	3.8	3.6	3.8	—	3.7
60	3.3	3.2	3.6	3.6	3.4
75	3.4	3.6	3.3	3.4	3.4
90	3.4	3.3	3.4	3.6	3.4
105	2.9	3.2	3.4	2.8	3.1
120	2.6	2.3	3.4	3.2	2.9

Table 2. Fractional Composition of aerosol after injection into chamber

Diameter of aerosol particles (in μ)	% age of particles after					
	5 min	10 min	20 min	30 min	45 min	60 min
0.9-1.1	4	12	10	6	8	20
1.5-1.7	80	80	85	90	84	70
2-3	10	6	3	4	8	10
3-4	6	2	2	—	—	—

Card 2/4 After 24 hr 0.03 0.03 0.06 — 0.04

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Table 3. Quantity of various size in chamber at different time intervals

Time after injection (in min)	Number of particles ($\times 10^4$) in 1 cm^3 with radius (in μ)				Total number of particles ($\times 10^4$) in 1 cm^3
	0.5	0.8	1.2	1.6	
5	2.92	58.4	7.3	4.38	73
10	7.68	51.2	3.84	1.28	64
20	6.1	51.85	1.83	1.22	61
30	3.06	45.9	2.04	—	51
45	2.96	31.08	2.16	—	37
60	6.8	23.8	3.4	—	31

Table 4. Gravimetric (weight) concentration of virus-containing material in an aerosol cloud at various intervals after injection into chamber

Total after injection (in min)	Gravimetric concentration (in mg/m^3 for particles of radius (in μ))				Total quantity of substance (in mg/m^3)
	0.5	0.8	1.2	1.6	
5	15.2	1226.4	518.3	749	2508.9
10	39.9	1075.2	272.6	218.9	1606.9
20	31.7	1088.8	129.9	208.6	1459
30	15.9	963.9	144.8	—	1124.6
45	15.4	652.7	210.2	—	878.3
60	35.4	500	241.4	—	776.8

tion and dispersion composition, the amount of material entering an animal's respiratory tract may be determined for any moment in the exposure period, using the formula $D = C \cdot V \cdot P \cdot t$ (C = concentration of aerosol substance in g/ml ; V = respiratory volume of animal in ml/min ; P = weight of animal in g ; t = time of exposure of animal to aerosol). The following data were obtained on the amount of material aspirated by mice in differing time periods: 1 — 5 min - 0.1 mg of substance absorbed; 5—10 min - 0.06 mg; 10—20 min - 0.12 mg; 20—30 min - 0.009 mg; 30—45 min - 0.1 mg; 45—60 min - 0.09 mg. The methods currently used in determining the fractional composition of aerosols do not

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ACC NR: AP6024444

yield absolutely accurate results and the possibility of using photoelectric devices to automate the counting of aerosol particles is considered. Orig. art. has: 4 tables. [EL]

SUB CODE: 15, 06/ SUBM DATE: 21May65/ ORIG REF: 004/ OTH REF: 003/ ~~AND PRESS~~

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Card 4/4

VLASENKO, A.V.

Banded structure of miaskites. Sov. geol. 6 no.7:140-143
Jl '63. (MIRA 16:8)

VLASENKO, A.V.

Geological structure of the Ili-Khem gold deposit. Izv. vys.
ucheb. zav.; tsvet. met. 4 no.4:3-9 '61. (MIRA 14:8)

1. Severokavkazskiy gornometallurgicheskiy institut, kafedra
mineralogii i petrografii.
(Kurtushubinskiy Range--Gold ores)

VLASSENKO, A.V.

Amphibolites in the Il'men Mountains. Nauch.dokl.vys.shkoly;
geol.-geog.nauki no.2:78-82 '59. (MIRA 12:8)

1. Ordzhonikidzevskiy gornyy institut.
(Il'men Mountains--Amphibolite)

VLASENKO, A.V.

Anorthoclase in Il'men Mountain alkali rocks. Nauch. dokl. vys.
shkely; geol.-geog. nauki no.3:124-126 '58. (MIRA 12:1)

1.Ordzhenikidzevskiy gornyy institut.
(Il'men Mountains--Rocks, Igneous)

VLASENKO, A. YE.

Beets and Beet Sugar

Sugar beet cultivation in Uzbekistan. Sov. agron. 10, no. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, May 1952,
Unclassified.

USSR/Cultivated Plants - Commercial. Oil-Bearing. Sugar-Bearing. M-5

Abs Jour : Ref Zhur - Biol., No 7, 1958, 29890

Author : Vlasenko, A.Ye.

Inst :

Title : Agrometeorology, Agrotechny and Bush Structure of Cotton.

Orig Pub : Sots. s. kh. Uzbekistana, 1957, No 5, 17-22

Abstract : No abstract.

Card 1/1

- 14 -

VLASENIKO, B.; GEORGIYEV, K.

State standards for canned stewed meat should be reconsidered.
Mias.ind.SSSR 31 no.5:31-32 '60. (MIRA 13:9)

1. Yessentuk'skiy konservnyy zavod (for Georgiyev).
(Meat, Canned--Standards)

VOLYNCHIKOV, N., inzh. (g.Lebedyan'); ZAMKOVSKIY, I.; OKNER, Kh.;
NIKOLENKO, M., inzh.; VLASENKO, B. (g.Krasnodar)

The reader continues the discussion. Sov. profsoiuzy 18 no.8:
16-18 '62. (MIRA 15:4)

1. Predsedatel' mestkoma sluzhby vodosnabzheniya st. Simferopol'
(for Zamkovskiy). 2. Predsedatel' postroykoma stroyupravleniya
No.3 tresta "Promstroy", g. Dushanbe (for Okner). 3. Chlen
mestnogo komiteta proyektnogo instituta "Mosbassgiproshakht",
g. Tula (for Nikolenko).

(Socialist competition)

VLASENKO, Georgiy Yefimovich; GLUZBERG, M.M., red.

[Active, industrious, built of reinforced concrete]
Zhivoi, trudovoi, zhelezobetonnyi. Khar'kov, Prapor,
1964. 136 p. (MIRA 17:12)

1. Predsedatel' ispolnitel'nogo komiteta Khar'kovskogo
gorodskogo Soveta deputatov trudyashchikhsya (for
Vlasenko).

VLASENKO, I.

Work organization with collective farms in the main branch.

Den. i kred. 21 no.8:63-66 Ag '63.

(MIRA 16:9)

1. Upravlyayushchiy Petrovskim otdeleniyem Gosbanka Stavropol'skogo kraja.

(Petrovskiy District (Stavropol Territory)--Banks and Banking)

(Petrovskiy District (Stavropol Territory)--Collective farms--Finance)

STEMBLER, M.; SAVCHENKO, O., tekhnik; VIASENKO, I., tekhnik

We are using local building materials. Sil'. bud. 7 no.5:
11 Mr '57. (MIRA13:6)

1. Nachal'nik Boguslavskogo rayonnogo otдела po stroitel'-
stvu v kolkhozakh.
(Boguslav District--Building materials)

VIASENKO, I., inzh.; SABALDYR, V., inzh.

And where is the lobby? Znan.ta pratsia no.3:28-29
Mr '60. (MIRA 13:6)
(Kiev--Subways)

VLASENKO, I.

Erroneous style of supervision. Mest.prom.i khud.promys. 3
no.3:31 Mr '62. (MIRA 15:3)

1. Direktor Toguchinskogo derevoobrabatyayushchego kombinata,
g. Toguchin, Novosibirskoy oblasti.
(Toguchin--Woodworking industries)

VLASTNIK, I.

That is better. Vest, prom. i Mud. promys. 2 no. 2:4 S '61.

(MIL: 14:11)

1. Direktor Toguchinskogo derevoobrabatyvayushchego kombinata,
Novosibirskaya oblast'.

(Novosibirsk Province-Woodworking Industries)

(Wage payment systems)

38189. Vlasenko, I. A.

Transheynaya kul'tura tsitrusovykh na Ukraine. (Opyt Botan.
sada Odes. gos. un-ta). Byulleten' Glav. botan. sada, vypts. 4, 1949,
s. 48-51

VLASENKO, I.A.; DOMBROVSKAYA, M.V.

Effect of prolonged exposure to darkness on chlorophyll content in
citrus in trench culture. Doklady Akad. nauk SSSR 82 no.3:465-468
21 Jan 52. (CML 21:5)

1. Presented by Academician A.Ye. Arbusov 21 November 1951.

VLASENKO, I. A.

Author: Vlasenko, I.A. and Lomborvskaya, M.V.

Title: Dynamics of carbohydrates in citrus plants under conditions of trench culture

Journal: Doklady Akademii Nauk SSSR, 1951, Vol.77, No.1, p. 125

Subject: Plant Physiology

From: D.S.I.R. Oct 51

CA

The dynamics of carbohydrates in citrus plants under conditions of trench culture. I. A. Abzenko and M. V. Ponomarevskaya (Odessa State Univ.). *Doklady Akad. Nauk S.S.S.R.* 77, 125-7 (1951). The total carbohydrate content drops in the beginning of winter (December) in New-Georgian lemon and in Eushiu tangerine; this appears to be the result of decreased amt. of light in the trench during this period. The Meyer lemon and Washington navel orange maintain a high level of carbohydrates, owing to their lack of sensitivity to shade. The total carbohydrates in the leaves of 1st and 2nd new shoots (in all the plants) which develop in the shade remain const. over January-March as long as the temp. is rather const. and low (1-3°). At higher temp. (4-26°) the New-Georgian lemon and Eureka lemon show a 50% decline in total carbohydrates from February to April and some 25-30% of the no. of leaves are shed in this period. The results show that under production conditions it is satisfactory to cover the plant trenches with opaque materials without visible harm to the plants during the winter months. G. M. K.

1. VLASENKO, I.'.
2. USSR (600)
4. Agriculture
7. Cultivation of citrus fruits in the southern Ukraine. Odessa, Obl. izd-vo, 1951

9. Monthly List of Russian Accessions. Library of Congress, February, 1953. Unclassified.

VLASENKO, I.A.; BABENKO, V.I.

Physiological characteristics of durum winter wheat. Nauch. zap.
Od. ped. inst. 25 no.2:120-124. '61.

(MIRA 18:2)

VLASENKO, I.A. DCMEROVSKAYA, M.V.

Photosynthesis, Chlorophyll, Citrus Fruits

Effect of prolonged exposure to darkness on chlorophyll content of citrus in trench culture. Dokl. AN SSSR, 82, No. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952, Unclassified

VLASENKO, I. A.; DACHOVSKAYA, N. V.

Photosynthesis, Chlorophyll, Citrus Fruits

Effect of prolonged exposure to darkness on chlorophyll content of citrus in trench culture. Dokl. AN SSSR, 82, No. 3, 1952.

SO: Monthly List of Russian Accessions, Library of Congress, June 1952 1952, Uncl.

CA 110

The dynamics of carbohydrates in citrus plants under conditions of trench culture. I. A. Vlasenko and M. V. Dombrovskaya (Odessa State Univ.). Doklady Akad. Nauk S.S.S.R. 77, 125-7 (1951). -The total carbohydrate content drops in the beginning of winter (December) in New-Georgian lemon and in Unshu tangerine; this appears to be the result of decreased amt. of light in the trench during this period. The Meyer lemon and Washington navel orange maintain a high level of carbohydrates, owing to their lack of sensitivity to shade. The total carbohydrates in the leaves of 1st and 2nd new shoots (in all the plants) which develop in the shade remain const. over January. March as long as the temp. is rather const. and low (1-3°). At higher temp. (4-26°) the New-Georgian lemon and Eureka lemon show a 50% decline in total carbohydrates from February to April and some 25-30% of the no. of leaves are shed in this period. The results show that under production conditions it is satisfactory to cover the plant trenches with opaque materials without visible harm to the plants during the winter months. G. M. K.

apparatus, methods, ...

B.T.R

5777° Continuous Ultramicroscopic Method of Dispersion
Analysis of Aerosols and Hydrosols. B. V. Denagin and G.
Ia. Vlasenko. Vestnik Akademii Nauk SSSR. v. 21, May 1951.
p. 76-78.
Above method of analyzing smokes and colloidal suspensions
is briefly described and discussed.

VLASENKO, I. G.

Use of fertilizers Mensk, Belarускаia akademiia navuk, 1934. 15 p.

1. Fertilizers and manures.

VLASENKO, I. P. -----

USSR/Medicine - Veterinary, Coccidiosis; Drugs

Card 1/1

Author : Li, P. N., Aspirant, and Vlasenko, I. P., Veterinary Technician

Title : Treatment of coccidiosis in calves with osarsol

Periodical : Veterinariya, 31, 42, May 1954

Abstract : Treatment of coccidiosis in calves is discussed. The treatment consists of administration of the drug, osarsol, and milk per os 3 times a day. Therapeutic dose of osarsol is between 0.2-0.5 g, depending on the age and weight of the animal. The course of treatment is between 4 and 6 days.

Institution : All-Union Institute of Experimental Veterinary Science

Submitted :

LI, P.N., aspirant; VLASENKO, I.P., veterinarnyy tekhnik.

Acetarsone therapy for coccidiosis in calves. Veterinariia 31
no.5:42 My '54. (MLBA 7:5)

1. Vsesoyuznyy institut eksperimental'noy veterinarii (for Li).

VLASENKO, I.P., inzh.; SUKHOMLINOV, R.M., inzh.

Study of the stresses in the pistons of the 2D100 diesel engine.
Teplovoz.i sud.dvig. no.3:138-163 '62. (MIRA 16:2)
(Diesel locomotives) (Diesel engines)

VLASINAC, I.P., kani. tekhn. nauk

Calculating the frequencies of torque vibrations of the shaft
of type D100 diesel generators. Vest. TSNII MIS 24 no.6:37-39
165. (MIRA 18:9)

VIASENKO, I.P.

Standardizing type D 100 marine engine. Sudostroenie no. 7:71-72
71 '63. (MIRA 18:8)

VLASENKO, I.P., kand. tekhn. nauk

Torsional vibrations of shaft transmissions of the D100 diesel
generators. Vest. mashinostr. 45 no. 9-17-20 S '65.

(MIRA 18:10)

VLASENKO, I.S. ,

* Some conclusions to be derived from the experimental use of
alternating current for the electrification of the Krasnoyarsk
Railroad. Zhel.dor.transp. 42 no.8:10-16 Ag '60.

(MIRA 13:8)

1. Zamestitel' nachal'nika Krasnoyarskoy dorogi.
(Railroads--Electrification)

VLASENKO, I.S.

Krasnoyarsk Railroad is preparing personnel for work on electric locomotives. Elek. i tepl.tiaga 2 no.4:7-8 Ap '58. (MIRA 12:3)

1. Zamestitel' nachal'nika dorogi po lokomotivnomy khizyaystvu, g. Krasnoyarsk.

(Krasnoyarsk Territory--Electric railroads)
(Employees--Education and training)

VLASENKO, I.V., inzh.

Dynamic take of the initial temperature of gas T_0 in gas turbine systems. Teploenergetika 11 no.4:57-60 Ap '64.
(MIRA 17:6)

1. Nevskiy mashinostroitel'nyy zavod imeni V.I. Lenina.

STEMPKOVSKAYA, L.A.; VLASENKO, I.V.; MITEL'MAN, B.Yu.

Removal of zinc salts from waste waters on a semi-industrial unit.
Khim. volok. no.1:33-36 '62. (MIRA 18:4)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR (for
Stempkovskaya, Vlasenko). 2. Kiyevskiy kombinat (for Mitel'man).

ACCESSION NR: APL025425

8/0096/64/000/004/0051/0060

AUTHOR: Vlasenko, I. V. (Engineer)

TITLE: Dynamic overshoot of the initial gas temperature T_0 in gas turbine installations

SOURCE: Teploenergetika, no. 4, 1964, 57-60

TOPIC TAGS: gas turbine start up, turbine temperature transient, transient gas turbine operation, turbine temperature overshoot

ABSTRACT: The dynamics of the turbine temperature overshoot during a change in operating conditions were considered for the configuration shown in Fig. 1 on the Enclosure (where the volume 3 includes the combustion chamber volume) with the following assumptions: quasisteady conditions, instantaneous combustion changes, constant compressor and turbine RPM during the transient. The dynamic equations yield the following expression for $\theta_{dyn} = \Delta T/T_0$:

$$\theta_{dyn} = \frac{\Delta q}{c_p T_0 G} \times$$

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ACCESSION NR: AP4025425

$$\times \frac{1}{\frac{G_g}{G_k} \left[\left(1 - \frac{c_p l_s}{c_p l_s} \right) \frac{\partial G_g}{\partial p} - \frac{m-1}{m} \frac{c_p T_s \cdot G_s \partial G_g}{c_p l_s p_s \partial T} \right]} = \theta_{st} K,$$

(where: Q = fuel consumption, G_g = flow through turbine, G_k = flow through compressor, m = polytropic index, T_s = compressor outlet temperature, $\theta_{st} = \Delta T/T_0$ static). Thus the temperature overshoot is independent of the volume between the compressor and the turbine, which affects only the duration of the process. Even for substantial volumes the temperature overshoot is reached during 0.1-0.2 seconds which supports the assumption of constant RPM. The partial $\frac{\partial \theta_{st}}{\partial p}$ has the major influence on the temperature overshoot. Orig. art. has: 14 formulas and 2 figures.

ASSOCIATION: Nevskiy mashinostroitel'nyy zavod im. V. I. Lenina (Nevskiy Machine Building Plant)

SUBMITTED: 00

DATE ACQ: 20Apr64

ENCL: 01

SUB CODE: PR

NO REF SOV: 000

OTHER: 000

Card 2/3

ACCESSION NR: AP4025425

ENCLOSURE: 01

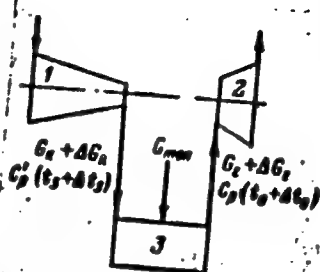


Fig. 1. Schematic of gas turbine installation.

Card 3/3

VFIEDIKTOVA, R.I.; VLASEIKO, I.V.

Extraction method of determining the moisture of free-flowing
materials. Zav. lab. 30 no.11:1332 '64 (MIRA 18:1)

1. Institut avtomatiki Gosplana UkrSSR.

OGNEV, R.K.; VLASENKO, I.Ye.,

Causes of crack formation in impregnated electrode production.
TSvet, met. 38 no.8:60-64 Ag '65. (MIRA 18:9)

OGNEV, R.K.; VIASENKO, I.Ye.

Heat dilatation and shrinkage of carbon materials saturated with
petroleum pitch. TSvet. met. 37 no.10:48-50 0 '64. (MIRA 18:7)

ANDRYUSHCHENKO, F.K.; VLASENKO, I.Ye.

Cathodic and anodic polarization of titanium in fluoboric acid solutions. Izv. vys. ucheb. zav.; khim. i khim. tekhn. 6 no.3: 455-458 '63. (MIRA 16:8)

1. Khar'kovskiy politekhnicheskii institut imeni Lenina,
kafedra tekhnologii elektrokhimicheskikh proizvodstv.
(Electrodes, Titanium) (Polarization (Electricity))
(Fluoboric acid)

1. 25107-45 ZND(a)/ZNP(a)/ZNT(m)/ZPP(a)/ZPP(b) Pr-1, Pr-11 NN/21

ACCESSION NR: AP5006303

5/01/76/64/500/010/0048/0050

AUTHOR: Ognev, R. K.; Vlasenko, I. Ye.

2

TITLE: Thermal expansion and contraction of pitch impregnated carbon materials

SOURCE: Tsvetnyye metally, no. 10, 1964, 48-50

TOPIC TAGS: carbon, carbon product, heat contraction, heat expansion, pitch material

Abstract: Measurement of thermal expansion and contraction of carbon specimens was accomplished on an especially designed apparatus. Specimens, 160 mm long and 60 mm in diameter, were used in the experiments and were selected from industrially annealed billets. A graphite powder was poured in the container to protect the specimens from oxidation.

Each specimen was tested twice: first, in the non-impregnated condition, and after impregnated with industrial pitch. The non-impregnated carbon specimens, similar to most solids, were subjected to thermal expansion during heating and to compression during cooling. The coefficients of thermal expansion were different in directions: parallel and perpendicular to the compression axis. Anisotropy of the physical properties of graphite-carbon materials is

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L 25107-65

ACCESSION NR: AP5006303

explained by the anisotropy of their structure formed in the compression of the carbon mass: solid particles of coke in compression on broaching presses are arranged with their long sides mainly along the compression axis.

Up to 650°C the linear thermal expansion of the investigated carbon materials is described by the following equations: parallel to compression axis $\Delta l = l_0 \cdot 5.1 \cdot 10^{-6} (t-20)$; perpendicular to the compression axis $\Delta l = l_0 \cdot 10.6 \cdot 10^{-6} (t-20)$ where l_0 is the length of the specimen at 20°C; t is the temperature of thermal expansion of carbon materials have a higher expansion coefficient perpendicular to the compression axis.

10. Although the temperature of the transition from one regularity to another is accompanied more or less uniformly.

The behavior of the pitch-impregnated specimens during heating is different from their behavior before impregnation. Under these conditions to the properties of the base annealed material are added the properties caused by the physical and chemical transformations of the pitch.

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L 25107-5

ACCESSION NR: AP5006303

Change in the length of the impregnated specimens during heating as opposed to their length at the corresponding temperatures in the non-impregnated state is shown.

In the interval 500-900°C thermal compression of the impregnated carbon material is observed, caused by the formation of coke from the pitch.

The volumetric compression of the pitch begins at 270°C and it is especially noticeable in the interval 370-550°C where an intensive liberation of the volatile substances occurs; the pitch loses 65-70% of its mass. However the pitch still contains volatile fractions and, gradually losing them, it goes from the liquid to the viscous stage and later to a plastic state; it is contracted in volume and it is not able to merge the more stably linked particles of the annealed material. At temperatures exceeding 500-570°C, the cohesive strength of the particles of coke and semi-coke formed from the pitch is compared to the cohesive strength of particles of the base material, and the compression process of the secondary coke is accompanied by the compression of the entire material.

The compression process proceeds quite intensely in the range 550-800°C. At higher temperatures the compression process gradually subsides -- the properties of the secondary coke approximate the properties of the primary coke mass.

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L 25407-65

ACCESSION NR: AP5006303

The capability of impregnated carbon materials for thermal compression is a very important property which must be considered when compiling graphs of the heat treatment of impregnated products. To prevent the cracking of the impregnated products their heating in the range from 500 to 850 C should be conducted at a reduced rate. In industrial treats with the products heated in this range at the rate of 145° C/hour, there was 50% breakage; products heated at the rate of 110° C/hour had 25% breakage, while there were no cracks in the products heated at the rate of 55° C/hour. (Fig. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 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621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157, 1158, 1159, 1160, 1161, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1177, 1178, 1179, 1180, 1181, 1182, 1183, 1184, 1185, 1186, 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1198, 1199, 1200, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1209, 1210, 1211, 1212, 1213, 1214, 1215, 1216, 1217, 1218, 1219, 1220, 1221, 1222, 1223, 1224, 1225, 1226, 1227, 1228, 1229, 1230, 1231, 1232, 1233, 1234, 1235, 1236, 1237, 1238, 1239, 1240, 1241, 1242, 1243, 1244, 1245, 1246, 1247, 1248, 1249, 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1264, 1265, 1266, 1267, 1268, 1269, 1270, 1271, 1272, 1273, 1274, 1275, 1276, 1277, 1278, 1279, 1280, 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1288, 1289, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418, 1419, 1420, 1421, 1422, 1423, 1424, 1425, 1426, 1427, 1428, 1429, 1430, 1431, 1432, 1433, 1434, 1435, 1436, 1437, 1438, 1439, 1440, 1441, 1442, 1443, 1444, 1445, 1446, 1447, 1448, 1449, 1450, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 1458, 1459, 1460, 1461, 1462, 1463, 1464, 1465, 1466, 1467, 1468, 1469, 1470, 1471, 1472, 1473, 1474, 1475, 1476, 1477, 1478, 1479, 1480, 1481, 1482, 1483, 1484, 1485, 1486, 1487, 1488, 1489, 1490, 1491, 1492, 1493, 1494, 1495, 1496, 1497, 1498, 1499, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1507, 1508, 1509, 1510, 1511, 1512, 1513, 1514, 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1847, 1848, 1849, 1850, 1851, 1852, 1853, 1854, 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 21

51310
11800

24035
S/080/61/034/006/001/020
D247/D305

AUTHORS: Andryushchenko, F.K., and Vlasenko, I.Ye.

TITLE: Certain electrochemical properties of titanium in solutions of hydrofluoboric acid

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 6, 1961, 1266 - 1270

TEXT: Among the electrolytes recommended for use in applying titanium (Ti) coatings to metals or metal coatings to Ti is a group containing fluoride ions (F⁻). The presence of F⁻ ions inhibits the formation of a passive film on Ti. An amount of HF in aqueous solution exceeding the critical concentration of 0.005 % is sufficient to promote solution of Ti. Preparation of a Ti surface for applying a metal coating is carried out in solutions containing HF. Satisfactory adhesion of the coating with the Ti base was obtained by anodic treatment of the Ti surface in a solution of HF in ethyleneglycol with a small amount of water added. For zinc-

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Certain electrochemical ...

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S/080/61/034/006/007/020
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plating of Ti an ethyleneglycol solution of Zn fluoride and HF was used and for copper coatings an aqueous solution of Cu hydrofluoroborate in water was used. The present paper describes experimental studies of the process of solution and electrochemical behavior of Ti in HBF_4 solutions. Determinations were made of the rate of Ti dissolution in acids of varying composition and the form of Ti transition into solution and the potential of Ti and redox potential of the medium were measured. The apparatus used is shown. Determinations were made in a stream of H_2 passed through the apparatus. The Ti and Pt electrode potentials were measured with a cathode type voltmeter, A4-M2. The dissolution of Ti was studied at 30°C in aqueous solutions containing 500, 250 and 125 g/l HBF_4 and in alcohol and ethyleneglycol solutions containing 250 g/l HBF_4 . The HBF_4 solution was prepared by mixture of equivalent amounts of boric and hydrofluoric acids and contained a certain proportion of HF due to incomplete reaction or hydrolysis. The proportion of solution per unit surface of Ti was 3.91 ml/cm^2 in all experiments. Curves of Ti dissolution, shown in Fig. 2, have a

Card 2/5

Certain electrochemical ...

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parabolic character and conform to the equation:

$$P = a \cdot \tau^b \quad (3)$$

where P is gravimetric loss of Ti specimen (mg/cm^2); a and b are constants which depend on solution composition, temperature, Ti purity and amount of solution per unit surface of specimen; τ is time in hours. The rate of dissolution is determined as the first derivative of this equation, i.e.

$$p = \frac{\partial P}{\partial \tau} = ab\tau^{b-1} \quad (4)$$

where p is rate of dissolution of Ti ($\text{mg}/\text{cm}^2 \cdot \text{hour}$). The influence of ionic concentration in the solution can be calculated from these equations or determined graphically from experimental data. It can also be calculated from a parabolic curve equation:

$$P = K \cdot [\text{Ti}^{3+}]^m \quad (5)$$

where $[\text{Ti}^{3+}]$ is the ionic concentration of Ti in the solution, K

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Certain electrochemical ...

and m are constants dependent on solution composition. Empirical formulae are given for the "critical" cathode current densities governing solution of Ti . Ti potentials were -0.6 to -0.7 volts. Redox potentials of solutions formed varied from -0.03 to $+0.13$ volts. There are 5 figures, 2 tables and 10 references: 6 Soviet-bloc, 4 non-Soviet-bloc. The references to the English-language publications read as follows: Morioka, A. Umezono, J. Japan Inst. Metals, 20, 7, 403, 1956; Connie L. Stanley, Abner Brenner, Techn. Proc. Am. Electroplaters' Soc., 123, 1956; Missel, Techn. Proc. Am. Electroplaters' Soc., 17, 1956; M. Eisenberg, and R.E. Delarue, J. Electroch. Soc., 105, 3, 162, 1958.

ASSOCIATION: Kafedra tekhnologii elektrokhimicheskikh proizvodstv Khar'kovskogo politekhnicheskogo instituta imeni V.I. Lenina (Department of Electrochemical Production Technology, Polytechnic Institute, Khar'kov, imeni V.I. Lenin)

SUBMITTED: July 26, 1960

Card 4/5

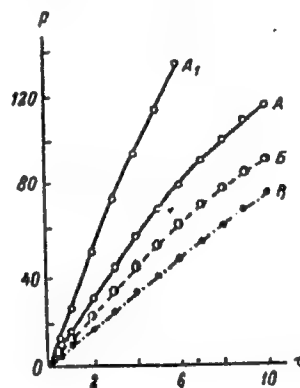
Certain electrochemical ...

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D247/D305

Fig. 2. Graph of Ti dissolution in HBF_4 .

Legend: P - gravimetric losses of specimens (mg/cm^2); τ - time in hours; A_1 - aqueous solutions of 500 g/l HBF_4 ; A - aqueous solutions of 250 and 125 g/l HBF_4 ; - alcoholic solution of 250 g/l HBF_4 ; B - ethyleneglycol solution of 250 g/l HBF_4 .

Рис. 2. Кривые растворения титана в растворах борфтористоводородной кислоты. P — потери веса образцов (mg/cm^2), τ — время (час). A_1 — в водном растворе, содержащем 500 г/л HBF_4 ; A — в водных растворах, содержащих 250 и 125 г/л HBF_4 ; B — в спиртовом растворе, содержащем 250 г/л HBF_4 ; B — в этиленгликолевом растворе, содержащем 250 г/л HBF_4 .



Card 5/5

ACCESSION NR: AP4009785

S/0065/64/000/001/0047/0050

AUTHORS: Vlasenko, I. Ye.; Ognev, R. K.

TITLE: Use of petroleum bitumens for impregnating carbon graphite materials

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 1, 1964, 47-50

TOPIC TAGS: carbon anode, carbon electrode, petroleum bitumen, coal tar pitch substitute, graphite electrode manufacture

ABSTRACT: Because the literary data is scant on the use of petroleum bitumens instead of coal tar pitch to bind carbon when manufacturing graphite electrodes, tests were run with BN-III, BN-IV and oxidized petroleum bitumens for impregnation of calcined carbon samples of electrode materials. The operation consisted in heating these samples to $300 \pm 5^\circ\text{C}$ in an autoclave furnace, pumping the air out for 30 min ($P_{\text{abs}} = 0.9 \text{ kg/cm}^2$), filling the autoclave with bitumen and keeping it under pressure of $P_{\text{abs}} = 5 \text{ kg/cm}^2$ for 3 hours. Bitumen BN-III has a softening point of $200 \pm 5^\circ\text{C}$ and differs from coal tar pitch in that it has more volatile fractions boiling out at 360°C ,

Card: 1/2

ACCESSION NR: AP4009785

less free carbon and absolutely no α -, γ - components. The impregnated samples were then graphitized. It is concluded that impregnating mixtures not only fill pores and cracks in the sintered electrode samples but also interact with this material resulting in a greater electric resistivity and strength of the impregnated samples. In its impregnating properties, the BN-IV bitumen approaches oil pitch (pitch + 5 to 15% anthracene oil) presently used for impregnation of electrode materials. Orig. art. has: 1 figure, 2 tables.

ASSOCIATION: Ukrtsvetmet (Ukrainian Non-ferrous Metals)

SUBMITTED: 00

DATE ACQ: 10Feb64

ENCL: 00

SUB CODE: CH

NR REF SOV: 002

OTHER: 004

Card 2/2

VLASENKO, I.Ye.; OGNEV, R.K.

Use of petroleum bitumen for the impregnation of carbon
graphite materials. Khim. i tekhn. topl. i masel 9 no.1:
47-50 Ja '64. (MIRA 17:3)

1. Ukrtsvetmet.

L 13578-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JG/WB
 ACCESSION NR: AP3000192 S/0080/63/036/004/0921/0922

AUTHOR: Andryushchenko, F. K.; Vlasenko, I. Ye. 59

TITLE: Method for treating the surface of Ti²⁷ before chrome plating 18

SOURCE: Zhurnal prikladnoy khimii, v. 36, no. 4, 1963, 921-922

TOPIC TAGS: Ti, Cr plating, NH sub 4 F, ZnF sub 2, NiF sub 2, CoF sub 2

ABSTRACT: To remove the passive film on Ti so that Cr²⁷ adheres better, the authors describe a method consisting of mechanical cleaning, removal of grease and rinsing, and immersion in a solution of NH sub 4 F containing ZnF sub 2, NiF sub 2, or CoF sub 2 at room temperature for 15 seconds to 3 minutes. Qualitative analyses showed that the films contained metallic Zn, Ni, or Co and S. Changes occurring in the potential of Ti in aqueous solutions of NH sub 4 F (500 g/l) and/or the other metal fluorides are shown in a graph. After this treatment, the Ti is pickled in 10% HCl for 15-30 seconds, rinsed in tap water for 15-30 seconds, plated with standard Cr electrolyte, and rinsed in hot and cold water. Orig. art. has: 1 figure. "N. V. Golizdra and T. A. Lebedinskaya participated in the study."

Card 1/2/

HAZLOVA, I.V.; STAKHANOVA, M.S.; KARAPET'YANTS, M.Kh.; VLASENKO, K.K.

Heats of dissolution of sodium and potassium chloride mixtures
in aqueous solutions. Zhur. fiz. khim. 39 no.5:1245-1248 My '65.
(MIRA 18:8)

1. Moskovskiy ordena Lenina khimiko-tehnicheskoy institut
im. D.I. Mendeleyeva.

VLASENKO, L.M.

Chromatographic variant for the fractional detection, isolation and determination of bismuth in the forensic chemical analysis of cadaveric material. Apt.delo 12 no.3:41-47 My-Je '62.

(MIRA 16:1)

1. Nauchno-issledovatel'skiy institut sudebnoy meditsiny

Ministerstva zdravookhraneniya SSSR.

(BISMUTH)

(CHEMISTRY, FORENSIC)

(CHROMATOGRAPHIC ANALYSIS)

VLASENKO, L.M.

Chromatographic isolation of morphine in the forensic chemical
study of cadaveric material. Sud.-med.ekspert. 5 no.3:38-43 J1-S
'62. (MIRA 15:9)

1. Nauchno-issledovatel'skiy institut sudebnoy meditsiny (dir. -
prof. V.I.Prozorovskiy) Ministerstva zdravookhraneniya SSSR.
(MORPHINE) (AUTOPSY)

VLASENKO, L.M.

Basic trends for the introduction of distribution
chromatography in forensic chemistry. Apt.delo 14
no.2:75-82 Mr-Ap '65.

(MIRA 19:1)

1. Nauchno-issledovatel'skiy institut sudebnoy meditsiny,
Moskva.

VLASENKO, M., kapitan

How to drive sheet-piling better. Voen. vest. 41 no.11:119-120
N '61. (MIRA 16:11)

VLASENKO, M.

Workers made possible the achievements of the enterprise. Mest.
prom.1 khud.promys. 2 no.3:18 Mr '61. (MIRA 14:4)

1. Direktor derevoobrabatyvayushchego kombinata, Novosibirsk.
(Novosibirsk--Woodworking industries)

V 2 11 2 10 15 0 22 1 5

86-11-29/31

AUTHOR: None given

TITLE: To Be Published ... (Vykhodyat iz pechati ...)

PERIODICAL: Vestnik Vozdushnogo Flota, 1957, Nr 11, p. 90 (USSR)

ABSTRACT: It is announced that in the near future the following books will be published by the Military Publishing House of the Ministry of Defense of USSR:

1. Some Problems on the Theory of Automatic Aircraft Control (Nekotoryye voprosy teorii avtomaticheskogo upravleniya samoleta) by V. P. Dmitriyev;
2. The Fundamentals of the Theory of Aircraft Turbojet Engines (Osnovy teorii aviatsionnykh turboreaktivnykh dvigateley) by M. I. Vlasenko;
3. The Treatment and Storage of Aircraft Armament (Obrabotka i konservatsiya aviatsionnogo vooruzheniya) by O. V. Artemenko, V. V. Nazarov, F.D. Piliponko, under the editorship of G. I. Krotov, Engr Lt Col.

AVAILABLE: Library of Congress

Card 1/1

SMIRNOVA, G.V.; VLASENKO, M.M.; SURIKOV, M.P. (Makhachkala)

Effect of insulin on protein metabolism in aged persons. Vrach, delo
no.6:649 Je '59. (MIRA 12:12)

1. Kafedra biokhimii (zav. - dotsent M.P. Surikov) Dagestanskogo
meditsinskogo instituta i Norskiy dom invalidov Yaroslavskoy oblasti
(zav. meditsinskoy chast'yu - vrach M.M. Vlasenko).
(INSULIN) (PROTEIN METABOLISM)

VLASENKO, M. Ya.

Stratametric survey of boreholes (From "Mining Journal" Je 1954).
Razved. i okh. nedr 22 no. 1: 59 Ja '56. (MLBA 9:5)
(Boring)

VLASENKO, N., arkhitektor

Controlling smoke in housing developments around ~~electric~~ power
stations. Zhil.stroi. no.7:6-8 Je '60. (MIRA 13:7)
(Smoke prevention)

VLASENKO, N., arkhitektor (Sverdlovsk)

Organizing the system of enterprises serving public needs in
settlements of the Ukraine. Zhil.-kom.khoz. 10 no.3:9-12 '60.
(MIRA 13:7)

(Ukraine--City planning)
(Ukraine--Municipal services)

VLASENKO, N. A.

USSR/Optics - Physical Optics, K-5

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35731

Author: Sinel'nikov, K. D., Shklyarevskiy, I. N., Vlasenko, N. A.

Institution: None

Title: Optical Characteristics of Complex Interference Light-Filters

Original

Periodical: Zh. tekhn. fiziki, 1956, 26, No 1, 96-101

Abstract: For the green region of the spectrum, complex interference light filters were prepared, consisting of 3 reflecting layers and 2 dielectric layers between them. The dielectric used was barium fluoride, and the reflecting layers were silver. In some cases the third reflecting layer was a multilayer dielectric coating. The optical characteristics of such light filters were investigated using a matching method previously proposed (Uch. zap. Khar'kovsk. gos. un-ta., Tr. fiz. otd., 1955, 6, 147). The transmission band was recorded with a DFS-4 spectrometer with a diffraction grating, having 600 lines/mm. It was shown that the transmission band of

Card 1/2

USSR/Optics - Physical Optics, K-5

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35731

Abstract: complex light filters is 5-10 times narrower than in simple interference filters (30-100 Å instead of 200-400 Å), and the transparency is 1.5-2 times better (30-50% instead of 20-30%). The use of a multilayer dielectric coating instead of a silver reflecting layer improves the quality of the filters. Further improvement in the optical characteristics lies along the path of replacing of all the silver layers with multiple-layer dielectric coatings.

Card 2/2

51-4-20/25

Complex interference optical filters with improved characteristics. (Cont.)

$R_2 = 93\%$ for M_1 and M_2 respectively, an overall transmission of 30% was obtained with a pass band (centred on 5000 Å) of only 45 Å and "contrast" of about 10^5 . A method of preparation of filters, similar to that for Fabry-Perot etalons, is also described. Two high-quality glass flats were covered with the usual layers (silver and barium fluoride) by vacuum evaporation; they were the $M_1D_1M_2$ systems. A wedge-shaped layer of air D_2 was left between the two plates. Light from a monochromator (of wavelength of the maximum of the filter pass-band) was made parallel by means of a lens focussed on the exit slit of the monochromator. This light was directed on to the filter. When D_2 was wedge-shaped hundreds of interference lines were visible. When the two surfaces M_2 became parallel the lines disappeared and the illumination became uniform. Then, keeping the plates parallel, they were adjusted by screws to give maximum uniform illumination ("consistent state"). There are 1 table and 6 references (4 of which are Slavic.)

ASSOCIATION: Kharkov State University. (Khar'kovskiy Gosudarstvennyy Universitet.)

SUBMITTED: September 15, 1956.

ard 2/2 AVAILABLE: Library of Congress

L 43878-65 EWT(1) PI-4 IJP(e)

ACCESSION NR: AP5006434

S/0051/65/018/003/0461/0466

AUTHOR: Vlasenko, N. A.

TITLE: Investigation of the simultaneous effects of an electric field and ultraviolet radiation on the luminescence of a ZnS-Mn sublimable phosphor

SOURCE: Optika i spektroskopiya, v. 18, no. 3, 1965, 461-464

TOPIC TAGS: zinc sulfide optic material, luminor, electric field effect, ultraviolet radiation effect, luminescence, phosphor, zinc sulfide, color luminescence

ABSTRACT: The investigation was made under conditions when the excitation of the luminescence was not accompanied by ionization of the luminescence center and by transport of charge, making it possible to ascertain the role played by the photochemical processes in the luminescence of the ZnS-Mn phosphor. The phosphor (without chlorine) was shown to excite the luminescence of the ZnS-Mn phosphor. The phosphor was excited with light of wavelength longer than 340 nm. The phosphor was prepared by a procedure described previously (Mater. Sci. Sovetsk. pol. luminescence).

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L 43878-65

ACCESSION NR: AP5006434

tsii [Materials of Seventh Conference on Luminescence] p. 36^c, Tartu, 1959). The ZnS-Mn film was deposited on glass coated with a conducting film of SnO₂, which served as a transparent electrode. The second electrode was aluminum sputtered on the phosphor. The excitation was with a PRK-4 mercury lamp with a filter separating the 404 nm line. The luminescence intensity was measured with a multiplier and amplifier, and the spectral measurements were made with a spectrometer with a grating monochromator. The results have shown that the process takes place with a high degree of efficiency. It is noted that the intensity of luminescence is a function of the temperature and activator-concentration. The results are compared with the theoretical calculations and the experimental data. It is concluded that the process is a radiative transition. The results are given in figures and a formula.

ASSOCIATION: None

Card 2/3 *1.4.4. 1965*

L 28331-66 EWP(k)/EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) JD/HW

ACC NR: AP6013082

SOURCE CODE: UR/0048/66/030/004/0688/0691

AUTHOR: Vlasenko, N. A.; Khomchenko, V. S.

ORG: none

TITLE: Investigation of low-voltage electroluminescence of ZnS:Cu:Cl films /Report, Fourteenth Conference on Luminescence held in Riga 16-23 September 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 4, 1966, 688-691

TOPIC TAGS: electroluminescence, crystal phosphor, zinc sulfide, frequency characteristic, voltage characteristic, metal film

ABSTRACT: The present study of sublimated ZnS:Cu:Cl films was undertaken in view of the paucity of data on these low-voltage electroluminophors. The films were prepared by a two-stage technique; the active film thickness varied in the range from 0.2 to 3 microns. The electrodes were of SnO₂ and Al. The metal electrode was applied either directly over the phosphor layer or over an insulating subcoating of SiO. Excitation was by ac, which yielded a higher brightness, or by dc (for specimens with a thin SiO coating). Specifically, there were investigated the electroluminescence spectrum and its frequency and voltage characteristics, the brightness waves under excitation by a sine voltage and by square pulses, the effect of probing pulses, transient processes, and the temperature dependences of the characteristics. It was found that many of the properties of ZnS:Cu:Cl films are similar to the corresponding

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attributes of electroluminescent cells prepared of this phosphor in powdered form: similar blue-green band intensity dependence on the excitation conditions; analogous frequency dependence of the brightness; similar brightness wave shape, etc. Figures show the electroluminescence spectra at different frequencies of the low voltage (7 and 14 volts) and the shape of the brightness waves under excitation by alternating polarity square pulses. On the basis of analysis of the experimental data it is inferred a) that the electroluminescence is a two-stage process (as in the case of the phosphor-powder cells), b) the effective field acting in the luminophor differs from the applied voltage, and c) that the experimental data do not conflict with the hypothesis of impact ionization. Orig. art. has: 1 formula, 2 figures and 2 tables.

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VLASENKO, N.A.

Simultaneous effect of an electric field and ultraviolet
radiation on the luminescence of ZnS-Mn phosphor sublimates.
Opt. i spektr. 18 no.3:461-466 Mr '65.

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VLADENKO, N.A.; YAREMKO, A.M.

Mechanism underlying the excitation of electroluminescence in
ZnS-Mn films. Opt. i spektr. 18 no.3:467-473 Mr '65.

(MIRA 18:5)